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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,239	11/27/2001	Yumman Chan	CA920000043US1	9665

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EXAMINER
DAY, HERNG DER

ART UNIT	PAPER NUMBER
2128	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/995,239	CHAN ET AL.
	Examiner	Art Unit	
	Herng-der Day	2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>27 November 2001</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-15</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-15</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>27 November 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-15 have been examined and claims 1-15 have been rejected.

Priority

2.   Acknowledgment is made of Applicants' claim for foreign priority under 35

U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. Canada

2,327,191, filed on November 30, 2000.

Specification

3.   The disclosure is objected to because of the following informalities:

Appropriate correction is required.

3-1.   It appears that "the reasoning mode component", as described in line 14 of page 9, should

be "the reasoning model component".

4.   The Examiner requests detailed information about the "IBM Recommendation Assistant

Framework™" referred to in the specification at page 9 because it appears to be reasonably

necessary to the examination of this application and cannot be found.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

6.   Claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6-1.   Claim 10 recites the limitation "comprising computer readable program code means for implementing the system component of any of claims 1 to 10" in lines 3-4 of the claim. There is insufficient antecedent basis for "the system component of claim 10" in the claim. For the purpose of claim examination, the Examiner will presume that "for implementing the system component of any of claims 1 to 10" as described in lines 3-4 of the claim refers to "for implementing the system component of any of claims 1 to 9".

6-2.   Claims not specifically rejected above are rejected as being dependent on a rejected claim.

Claim Rejections - 35 USC § 101

7.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

8.   Claims 1-11 and 13-15 are rejected under 35 U.S.C. 101 because the inventions as disclosed in claims are directed to non-statutory subject matter.

8-1.   Claims 1-9 claim computer system reasoning model component which appears to be directed merely to software modules and is non-statutory for failing to be in one of the categories of patentable invention.

8-2.   Claims 10-11 and 13-14 claim computer program product comprising a computer useable medium as a modulated carrier signal which is a transmission over a network. The claimed

computer readable signal-bearing medium will not result in a practical application producing a

concrete, useful, and tangible result because it is not tangibly embodied.

8-3.   Claim 15 claims computer program which is software, per se, and is non-statutory for

failing to be in one of the categories of patentable invention.

8-4.   The Examiner acknowledges that even though the claims are presently considered non-

statutory they are additionally rejected below over the prior art. The Examiner assumes the

Applicants will amend the claims to overcome the 101 rejections and thus make the claims

statutory.

Recommendations

9.   Claim 9 recites the limitations "in the graph" in lines 12 and 22 of the claim. For

clarification purposes, the Examiner suggests that "in the graph" be replaced with "in the

decision graph".

Claim Rejections - 35 USC § 102

10.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11.   Claims 1, 4-7, and 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by

Mattern et al., U.S. Patent 6,763,342 B1 issued July 13, 2004 and filed July 12, 2000.

11-1.   Regarding claim 1, Mattern et al. disclose a computer system reasoning model

component for generating user recommendations for a defined knowledge base, the component

comprising

a component for storing, maintaining and representing a decision graph definable by an

author (The user can modify the decision paths, column 5, lines 44-46), the decision graph

comprising nodes and links between the nodes (a tree structure indicating their relationship,

column 5, lines 33-54), the nodes comprising a set of decision nodes, and a set of feedback

nodes, each of the nodes in the decision graph comprising rules defined by the author to define

links to other nodes in the graph, and for a decision node, to request and obtain user information

(question and reply nodes, column 6, lines 26-35), and for a feedback node, to provide feedback

to users (solution nodes, column 6, lines 26-35), and

a component to traverse the decision graph and fire the rules defined in the decision

graph nodes (the reply is evaluated and the knowledge module 208 is accessed to retrieve the

next node corresponding to the selected reply, column 12, lines 4-10).

11-2.   Regarding claim 4, Mattern et al. further disclose the nodes contain no information

relating to presentation of data to a user (the retrieved information may be assembled with other

(page-definition) information stored within the data store 221 to create a Web page, column 11,

lines 57-67).

11-3.   Regarding claim 5, Mattern et al. further disclose the rules defining links to other nodes

in the graph comprise rules accessing and evaluating one of:

a) personalization choices collected implicitly or explicitly from the user (the reply is

evaluated, column 12, lines 4-16),

b) static data relating to the user,

c) a dynamically generated user model,

d) attributes of elements in the knowledge base, and

e) author-related goals.

11-4. Regarding claim 6, Mattern et al. further disclose the decision graph comprises multiple entry points (a leap is used to redirect other decision paths to one common question node, column 6, lines 15-20).

11-5. Regarding claim 7, Mattern et al. further disclose the decision graph comprises nodes potentially chaining the decision graph to other decision systems (links to external documents may be added to an answer node, column 10, lines 40-49).

11-6. Regarding claims 10-14, these computer program product claims include same component limitations as in claims 1 and 4-7 and are anticipated using the same analysis of claims 1 and 4-7.

11-7. Regarding claim 15, this computer program claim includes same component limitations as in claim 1 and is anticipated using the same analysis of claim 1.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 2-3, 8-9, and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Mattern et al., U.S. Patent 6,763,342 B1 issued July 13, 2004 and filed July 12, 2000, in

view of Herz et al., U.S. Patent Application Publication 2001/0014868 A1 Published August 16,

2001.

13-1.   Regarding claim 2, Mattern et al. disclose a computer system reasoning model

component in claim 1 in which the decision nodes comprise question nodes (question and reply

nodes, column 6, lines 26-35) and the feedback nodes comprise recommendation nodes (solution

nodes, column 6, lines 26-35; the solution is presented to the user machine, column 12, lines 38-

50). Mattern et al. fail to expressly disclose the feedback nodes comprise promotion nodes.

Herz et al. disclose a system for the automatic determination of customized prices and

promotions. The system automatically constructs product offers tailored to individual shoppers

in a way that attempts to maximize the vendor's profits (Herz, paragraph [0004]).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teachings of Mattern et al. to incorporate the teachings of Herz et al. to

obtain the invention as specified in claim 2 because automatically constructing product offers

tailored to individual shoppers by providing customized prices and promotions would attempt to

maximize the vendor's profits.

13-2.   Regarding claim 3, Herz et al. further disclose promotional nodes comprise cross-sell and

up-sell nodes (selects offers from the offer database that are likely to result in profitable sales,

paragraph [0037]; present selected offers to shopper, paragraph [0038]).

13-3.   Regarding claim 8, Herz et al. further disclose the rules defining links between nodes in

the decision graph utilize one of:

weighting systems (Novelty control can be done by appropriately adjusting the

associating weights, paragraphs [0143]-[0146]),

    fuzzy logic systems, and

    probabilistic reasoning.

13-4. Regarding claim 9, Mattern et al. disclose a computer system reasoning model

component for generating user recommendations for a defined knowledge base, the component

comprising:

    a component for storing, maintaining and representing a decision graph definable by an

author (The user can modify the decision paths, column 5, lines 44-46), the decision graph

comprising nodes and links between the nodes (a tree structure indicating their relationship,

column 5, lines 33-54), the nodes comprising a set of decision nodes, and a set of feedback

nodes, the decision nodes comprising question nodes and the feedback nodes comprising

recommendation [and promotion] nodes, each of the nodes in the decision graph comprising

rules defined by the author to define links to other nodes in the graph, and for a decision node, to

request and obtain user information (question and reply nodes, column 6, lines 26-35), and for a

feedback node, to provide feedback to users (solution nodes, column 6, lines 26-35),

    the rules defining links to other nodes in the decision graph comprising rules accessing

and evaluating one of:

        (f) personalization choices collected implicitly or explicitly from the user (the

reply is evaluated, column 12, lines 4-16),

        (g) static data relating to the user,

        (h) a dynamically generated user model,

(i) attributes of elements in the knowledge base, and

(j) author-related goals; and

a component to traverse the decision graph and fire the rules defined in the decision

graph nodes (the reply is evaluated and the knowledge module 208 is accessed to retrieve the

next node corresponding to the selected reply, column 12, lines 4-10).

Mattern et al. fail to expressly disclose (1) the feedback nodes comprise promotion nodes;

(2) utilize one or more of:

(i) weighting systems,

(ii) fuzzy logic systems, and

(iii) probabilistic reasoning.

Herz et al. disclose a system for the automatic determination of customized prices and

promotions. The system automatically constructs product offers tailored to individual shoppers

in a way that attempts to maximize the vendor's profits (Herz, paragraph [0004]). Specifically,

Herz et al. disclose:

the feedback nodes comprise promotion nodes (for example, a 'digital coupon' is

transmitted to a customer over the computer network, paragraph [0279]);

and utilize one of:

(i) weighting systems (Novelty control can be done by appropriately adjusting the

associating weights, paragraphs [0143]-[0146]),

(ii) fuzzy logic systems, and

(iii) probabilistic reasoning.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the teachings of Mattern et al. to incorporate the teachings of Herz et al. to

obtain the invention as specified in claim 9 because automatically constructing product offers

tailored to individual shoppers by providing customized prices and promotions would attempt to

maximize the vendor's profits.

13-5.   Regarding claims 10-14, these computer program product claims include same

component limitations as in claims 2-3 and 8-9 and are unpatentable using the same analysis of

claims 2-3 and 8-9.

Conclusion

14.   The prior art made of record and not relied upon is considered pertinent to Applicant's

disclosure. Reference to Grimse et al., U.S. Patent 6,269,355 B1 issued July 31, 2001, is cited as

disclosing an automated process guidance system using knowledge management system.

Reference to Bieganski, U.S. Patent 6,321,221 B1 issued November 20, 2001, is cited as

disclosing a method for increasing the user value of recommendations.

Reference to Nakisa et al., U.S. Patent 6,741,975 B1 issued May 25, 2004, and filed

August 31, 2000, is cited as disclosing a rule based expert system for consumer preference.

15.   Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Herng-der Day whose telephone number is (571) 272-3777. The

Examiner can normally be reached on 9:00 - 17:30.

Any inquiry of a general nature or relating to the status of this application should be

directed to the TC 2100 Group receptionist: (571) 272-2100.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Jean R. Homere can be reached on (571) 272-3780. The fax phone numbers for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Herng-der Day
July 25, 2005

Thai Phan
Patent Examiner
AU: 2128